PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q78495

Mikael Bliksted LARSEN

Continuation of Appln. No.: 10/232,322,

Filed: September 3, 2002

Group Art Unit: 3661

Confirmation No.: Not Yet Known

Examiner: Not Yet Known

Filed: November 14, 2003

For:

METHOD AND SYSTEMS FOR NAVIGATING UNDER WATER

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.97 and 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 CFR §1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form which are all the references of record in parent application No. 10/232,322. Applicant is not submitting duplicate copies of these references but requests that they be listed on the face of any patent granted on the above application. (See 37 CFR §1.98(d)).

In addition, in accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the one (1) additional document which is listed on the attached PTO/SB/08 A & B (modified) form and which the Examiner may deem Information Disclosure Statement

Continuation of Application Serial No. 10/232,322

Filed: November 14, 2003

Sughrue Ref: Q78495

material to patentability of the claims of the above-identified application. One copy of the listed

documents is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three

months from the application's filing date; (2) Before the mailing date of the first Office Action

on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

filing a request for continued examination (RCE) under §1.114, and therefore, no Statement

under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such

document constitutes prior art against the claims of the present application. Applicant does not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

Registration No. 46,027

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WASHINGTON OFFICE 23373

CUSTOMER NUMBER

Date: November 14, 2003

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Substitute for Form 144	for Form 1449 A & B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Continuation of		
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,	,		V	First Named Inventor	Mikael Bliksted LARSEN
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Sheet	1	of	2	Attorney Docket Number	Q78495

			U.S. P	ATENT DOCUM	IENTS
Evaminar	Cite	Document Nu	mber	Publication Date	
Examiner Initials*	No.1	Number	Kind Code ² (if known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
,		US 4,315,326		02/1982	Chase, Jr., Jay V.
		US 4,559,621		12/1985	Robert Delignieres
		US 5,119,341		06/1992	James W. Youngberg
	,	US 5,357,437		10/1994	Donald G. Polvani
		US 5,579,285		11/1996	Thomas Hubert
		US 6,532,192		03/2003	Ceri St. John Reid
		US			

	FOREIGN PATENT DOCUMENTS									
Examiner Cite	Cite	For	eign Patent Docur	nent	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document				
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		NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.			
		Hassab, et al., "Positioning and Navigation Under the Sea: an Acoutis Method", IEEE, August 1974, pages 145-149			
		Babb, "navigation of Unmanned Underwater Vehicles for Scientific Surveys", IEEE June 1990, pages 194-198			
	-	Rendas, et al. "Hybrid Navigation System for Long Range Operation", IEEE July 1994, pages 353-359			
		Scherbatyuk, et al., "Integrated Positioning System For Underwater Autonomous Vehicle", IEEE September 1994, pages 384-388.			
		Deveau, "Modern Computing Technology Applied to Underwater Acoustic Positioning Systems," IEEE October 1995, pages 16-174			
		Vagany, et al., "Outlier Rejection for Autonomous Acoustic Navigation," IEEE 2000, pages 1043-1050			

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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

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INFOI	DMATION	DICCI OC	SUDE	Application Number	10/232,322		
				Confirmation Number	Not Yet Known		
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				Examiner Name	Not Yet Known		
Sheet	2	of	2	Attorney Docket Number	Q78495		

			U.S.	PATENT DOCUM	ENTS
Examiner Initials*		Document	Number		
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Initials*	No.1	journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation
		Larsen, "Synthetic Long Baseline Navigation of Underwater Vehicles," IEEE 2000, pages 2043-2050	
		Sherbatyuk, "The AUV Positioning Using Ranges from one Transponder LBL", IEEE October 1995, pages 1620-1623	
		Yun, et al., "An Integrated GPS/INS Navigation System for Small AUVs Using an Asynchronous Kalman Filter, IEEE August 1998, pages 43-49	
		Sollier, et al., "Wideband Underwater Acoustics Transmissions Application to Unmanned Underwater Vehicles Positioning and Control," UDT Pacific 98, 24-26 February 1998 Sydney Convention Centre Australia, pages 245-249.	

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